

Newport News Composite Squadron

August 2009 Safety Briefing

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National Safety Council Calendar

AUGUST 2009

August 1 - 31	National Immunization Awareness Month	Centers for Disease Control and Prevention	(800) 232-4636	cdc.gov
August 24 - 30	National Safe at Home Week	Safe At Home	contact@safeathomeonline.com	Safetyat Home NSC Factsheets, Safety at Home

National Immunization Awareness Month – Bodily Injury
National Safe at Home Week – Bodily Injury

101 Critical Days of Summer

Civil Air Patrol

Citizens Serving Communities



101 Critical Days of Summer

U.S. AIR FORCE
AUXILIARY



101 Critical Days of Summer



- ◆ Memorial Day Weekend through Labor Day Weekend
 - ◆ “Critical” because many lose their lives
 - ◆ More activities mean more risk
 - ◆ More risk means more injuries
 - ◆ Safety = Planning with knowledge of the past and making choices that prevent mishaps
 - ◆ Some risk is necessary for a meaningful life
 - ◆ Must weigh benefits and costs of each risk

CITIZENS SERVING COMMUNITIES



Vehicle Safety



- ◆ As a result of 6,000,000 car accidents in the US each year
 - ◆ 3,000,000 will be injured
 - ◆ 42,000 will be killed
 - ◆ The leading cause of fatal mishaps during this period
- ◆ Contributing factors include: Fatigue, alcohol, drugs, speeding & not using seatbelts
- ◆ Survival plan:
 - ◆ Insist on seat belt use
 - ◆ Don't drive impaired
 - ◆ Plan your trip
 - ◆ Inspect your vehicle
 - ◆ Don't speed (or go too slow)
 - ◆ Don't tailgate



CITIZENS SERVING COMMUNITIES



Water Safety



- ◆ Each year in the US,
 - ◆ 3,500 drown
 - ◆ 4,500 injured while boating
 - ◆ 700 killed while boating
- ◆ PFDs could reduce fatalities 90%
- ◆ Contributing factors include: alcohol, lack of PFDs, horseplay, and underwater obstructions
- ◆ Survival plan:
 - ◆ Use a "designated Captain"
 - ◆ Don't overload the boat
 - ◆ PFDs on weak swimmers
 - ◆ Explore water/feet first
 - ◆ Keep throwable PFD nearby
 - ◆ Use the engine kill switch



CITIZENS SERVING COMMUNITIES



Weather



- ◆ Weather Dangers
 - ◆ All Thunderstorms are dangerous
 - ◆ Lightning kills more people each year than tornadoes
 - ◆ Hailstones can fall at speeds in excess of 100 mph
 - ◆ Stay inside when storms are approaching
 - ◆ Listen for information on Watches and Warnings



CITIZENS SERVING COMMUNITIES



Summary



- ◆ The goal is *FUN* this summer!
- ◆ When someone is injured - it stops being fun!
- ◆ Make your own luck by managing risks
- ◆ Have fun by being careful out there!



CITIZENS SERVING COMMUNITIES

Aviation Safety

http://www.aopa.org/asf/epilot_acc/chi06fa037.html



Scud running leads to tower strike

This time of year, many pilots are planning flights to visit family for Thanksgiving or the December holidays. Often these trips cover long distances, and the pressure to get there and get back home on schedule can be strong. Faced with marginal weather conditions, some pilots may feel compelled to take chances—to push the limits of their abilities, their ratings, and their better judgment in an effort to complete the flight. It's a decision that invites tragedy.

Flying home on Thanksgiving weekend in 2005, the VFR-only pilot of a Piper PA-28-140 Cherokee attempted to scud run below a 900-foot ceiling. The relatively flat Nebraska terrain was forgiving, but the 1,000-foot radio tower in his path was not. The collision sheared off both wings and killed the pilot and two passengers.

The flight departed Centennial Airport near Denver, Colo., about 7 a.m. on Nov. 27. After spending Thanksgiving with family, the pilot, his young daughter, and his fiancée were returning home to Morris Municipal Airport near Morris, Ill., a trip of about 750 nautical miles.

About three hours into the flight, the Cherokee was passing Atlanta, Neb. Weather conditions were deteriorating ahead of an approaching winter storm. The METAR at nearby Brewster Field Airport was reporting 19-knot winds gusting to 24 knots, 10-mile visibility, sky overcast at 900 feet agl, temperature 1 degree C, dew point -1 degree C, and altimeter 29.32. Witnesses reported random patches of heavy rain.

A motorist traveling on U.S. Highway 6 later described the scene that unfolded: "About a mile past Atlanta, Nebraska, I noticed a plane heading east. It was flying low, below the clouds and dangerously close to the KLNE Channel 3 TV station tower. ... Suddenly the plane struck the tower or one of the tethers that held the tower up. The tower began to crumble and the plane crashed into a nearby field."

NTSB investigators found both wings separated from the fuselage, which came to rest inverted about 500 feet from the base of the collapsed tower. The right wing had a semicircular crush in the leading edge, while the left wing showed linear tearing consistent with guy wire impact. A transfer of "aviation orange" paint from the tower was found on the propeller. The throttle and mixture controls were in forward positions, and the airspeed indicator was stuck at 120 mph.

The tower was depicted on the Omaha sectional chart as an obstruction standing 1,066 feet agl. The tower site manager had inspected the structure about 10 minutes before the accident. He reported that the tower's lights were operating, although the top 100 to 125 feet of the tower was hidden in the clouds.

The NTSB cited the noninstrument-rated pilot's failure to maintain clearance from the marked tower and his continued flight into adverse weather as the cause of the accident. A factor in the crash was the low ceiling.

The hazards of scud running are well documented over mountainous terrain. But even above the flatlands of Nebraska, attempting to squeeze a fast-moving airplane between low clouds and terra firma is a dangerous gamble. When the ceiling drops below the maximum elevation figure (MEF) depicted on aeronautical charts, a VFR-only pilot belongs on the ground.

Sadly, the accident pilot passed within a few miles of three different airports during the last 50 miles of his flight. Each provided an opportunity to land, secure the airplane, and rent a car for the remainder of the trip. (Or rent a hotel room, call the boss, and say, "I'll see ya Tuesday.") The key to a safe holiday flight is having a solid Plan B—and a willingness to use it.

Runway Safety Summer Safety Initiative

Notice Number: NOTC1789

This past May, the FAA Office of Runway Safety implemented a Summer Initiative targeted at stemming what has become a seasonal pattern of increasing runway incursions during the warm weather months. Compared to the rest of the year, runway incursions average about 30 percent higher per month between May and August.

Two-thirds of all runway incursions are the result of pilot deviations – and three-fourths of those pilot deviations involve a general aviation aircraft.

Part of the problem stems from pilots who, after a period of little or no flying, may be a little rusty on airport procedures. That rust, however, can have tragic consequences in the area of an active runway. In fact, the single most deadly aviation accident in history resulted from a runway incursion. Don't become a statistic!

Here's what you can do:

Stop Anytime you're unclear or unsure about your location or about an ATC instruction or about anything else, don't hesitate to call the tower and ask for help. If you are on a runway without approval, exit the runway, and contact ATC.

Look Before taxiing: Study the airport diagram before starting your engine. Keep a copy in the cockpit. Download airport diagrams at: <http://www.naco.faa.gov/>. Pay careful attention to airfield signs and markings. Complete checklists, programming, and other pre-flight activities. While taxiing: Practice heads-up and eyes-out. Avoid distracting tasks; focus on your route.

Listen Listen carefully to, write down, and read back all air traffic instructions. Get ATC approval before crossing or using any runway. "Taxi to" does not allow you to enter the runway.

Finally, talk to your fellow pilots. Help us raise runway safety awareness. If we, working as a team, can prevent even one runway incursion, this campaign will be a success.

There is a nice reminder card available for you to download at https://www.faasafety.gov/files/notices/2009/Jul/FAA_Runway_Incursions.pdf

For more information contact Gregory Y. Won, Air Traffic Safety Organization, Runway Safety Office, Risk Reduction Information Group, 202-385-4792

Driving Safety

<http://www.dmv.state.va.us/webdoc/safety/programs/seatbelts/index.asp?pf=y>



Seat Belts

The Virginia Highway Safety Office wants to remind you that seat belts are your best defense during a crash. The primary function of the seat belt is to prevent ejection and spread crash forces over a wider part of the body to reduce injury and fatality. In fact, with the proper use of seat belts you are 40% less likely to be fatally injured during a crash. With these odds, why wouldn't you buckle up? Virginia law requires seat belt use for drivers and front seat passengers over 16 years of age, but make sure that all passengers in the vehicle are properly buckled up whether they are in the front seat or the back.

More Facts About Seat Belts

- Airbags do not replace the need for seat belts. When used with seat belts, airbags further reduce the risk of death or injury in the event of a crash.
- Seat belts hold the driver in place, helping the driver maintain control of the car during a collision. The lap belt should fit low and snug across the hips while the shoulder belt keeps the driver from pitching forward into the steering wheel, dashboard and windshield.
- For an adult, the shoulder harness should fit closely against the chest, never under the arm. The lap belt should fit low and snug across the hips, never across the abdomen.
- For a child, the shoulder harness should fit over the shoulder and across the breastbone. The lap belt should fit low and snug across the hips.
- For pregnant women, keep the lap belt low across the hips, never across the abdomen.
- Medical costs resulting from traffic crashes are twice as costly for occupants who are not belted.
- An insured driver who routinely wears a seat belt pays higher premiums each year to cover crash-related medical expenses for those who do not wear seat belts.
- When a driver is buckled with a seat belt, children are likely to be buckled 87 percent of the time. When a driver is not buckled in a seat belt, children are likely to be buckled only 24 percent of the time.



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National Campaign to Stop Red Light Running

FOR IMMEDIATE RELEASE

Contact: Jeff Agnew, 202-828-9100

Red Light Running Survivors Tell Their Stories in Advance of *National Stop on Red Week*

*Special Issue of Safety Focus Newsletter Devoted to
Red Light Running Victims & Survivors*

WASHINGTON, D.C. (July 9, 2009) — In advance of National Stop on Red Week (August 2–8), the National Campaign to Stop Red Light Running is pleased to present a special issue of our newsletter, *Safety Focus*, written by 13 red light running survivors and dedicated to all red light running victims, survivors and their families and friends.

Since its founding in 2001, red light running survivors from across the country have contacted the Campaign. Some simply want to tell their story. Others want tougher penalties and enforcement. Almost all want to be a part of an organization that focuses on publicizing and preventing the kind of crashes that have had such a horrific impact on their lives.

Written by red light running survivors from Minnesota, New Jersey, Arizona, Florida, Texas, Michigan, Washington and Indiana, the stories are heartbreaking, but they are not offered in an attempt to play on emotions. They are presented to show the living flesh and breath behind the cold statistics of traffic crashes.

As National Campaign and Survivor Spokesperson Ann Sweet wrote, survivors tell their stories "to make others aware of the extreme danger at intersections and the need to decrease the number of families facing the same misery from which my family will never recover."

In 2007, red light running resulted in more than 153,000 injuries and 900 fatalities in the United States.

"Because National Stop on Red Week is dedicated to educating Americans about the dangers of running red lights, we thought it was appropriate to let survivors tell, in their own words, how their lives have been shattered by this deadly driving behavior," said Leslie Blakey, executive director of the National Campaign to Stop Red Light Running. "We thank these survivors for their contributions."

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The National Campaign to Stop Red Light Running, headquartered in Washington, DC, is dedicated to reducing the incidences of red light running in the United States and the fatalities and injuries it causes. The campaign has assembled a team of leaders from the fields of law enforcement, transportation engineering, healthcare and emergency medicine, and traffic safety,

500 New Jersey Ave. NW – Suite 400 – Washington, D.C. 20001 – Phone 202-828-9100 – Fax 202-638-1045
www.stopredlightrunning.com

Bodily Injury

<http://www.cdc.gov/Features/RabiesSafeFamily/>

Protect Your Family from Rabies



Rabies is a dangerous virus that anyone can get if they handle or get bitten by an animal that has the disease. Protect yourself and your family from rabies: Stay away from wild animals and be sure pets are vaccinated every year.

Rabies is caused by a virus and can infect both people and animals. People usually get rabies when they are bitten by an animal that is sick with the disease. Early symptoms of rabies in people can include fever, headache, and weakness. As the disease gets worse, symptoms may include difficulty sleeping, anxiety, confusion, tingling sensation usually at the site of the bite, excitation, hallucinations, agitation, salivating more than usual, difficulty swallowing, and fear of water. Death usually occurs within days of the onset of symptoms.

Avoid Wild Animals



More than 90% of all animal rabies cases reported to CDC each year occur in wild animals. The main animals that get rabies include raccoons, skunks, foxes and bats.

One of the best ways to protect yourself and your family is to avoid contact with wild animals. Do not feed or handle them, even if they seem friendly. If you see a wild animal acting strangely, report it to animal control.

Keep Pets Healthy

Family pets and other domestic animals can get rabies if they are bitten by rabid wild animals. When rabies from wild animals "spills over" into domestic animals, the risk to people is increased because of our close contact with pets.

In general, pets have a higher risk of coming into contact with wild animals that may have rabies than we do. Cats, dogs and ferrets that have not gotten their rabies shots and are exposed to rabies must be quarantined for six months, or put down, because of their risk of getting rabies after the exposure. To help reduce this risk:



- Visit your veterinarian with your pet on a regular basis and keep rabies vaccinations up-to-date for all cats, ferrets, and dogs.
- Maintain control of your pets by keeping cats and ferrets indoors and keeping dogs under direct supervision when outdoors.

- Spay or neuter your pets to help reduce the number of unwanted animals that may not be properly cared for or vaccinated regularly.
- Call animal control to remove all stray animals from your neighborhood since these animals may be unvaccinated.
- Do not feed or water your pets outside and keep your garbage securely covered. These items may attract wild or stray animals.

Take Action If You Are Bitten

If you or someone in your family is exposed to a rabid animal, rabies can be prevented through a series of shots called rabies post-exposure prophylaxis (PEP).

If you are bitten by any animal (domestic or wild), immediately wash the wound well with soap and water and see a healthcare provider. Contact animal control if you are bitten by an animal, to assist in capturing the animal for observation or rabies testing.

Be Cautious While Hiking, Camping, and Playing Outdoors



During the summer, many Americans love to spend time in the outdoors. Few people will ever be exposed to a rabies-suspect animal or need to see a doctor due to a potential exposure. Teach children and others never to handle live or dead wild animals, as well as unfamiliar domestic animals. Tell them to report any unusual animal behavior to an adult right away, because it could mean that the animal is very sick.

Some might have concerns about the presence of bats in locations such as camps. While bats have been known to expose people to rabies, most bats in a natural setting are not rabid and, in many camp situations, the presence or sighting of bats is common and normal.

However, precautions can be taken at camp sites and along trails to help minimize the risk of exposure to bats for your child or family members:

- When possible, prevent bats from entering campground living quarters and other occupied spaces. Animal care and wildlife conservation agencies can provide further information on "bat-proofing." Visit the following link for more information on "bat-proofing": <http://www.cdc.gov/rabies/bats.html>
- Screens or mosquito netting can provide a useful barrier against direct bat contact.
- Teach children and other camp attendees never to handle live or dead bats, as well as unfamiliar wild or domestic animals (even if they appear friendly). Tell children to report any contact or unusual animal behavior to an adult or camp official right away.

Talk With Your Family About the Seriousness of Rabies



While very few people die from rabies, life-threatening situations can arise when potential exposures occur and preventive measures are not undertaken. Each year 30,000 to 40,000 persons in the U.S. require PEP due to potential exposures to rabies.

To help ensure your loved ones do not face similar risks, use the above information to talk with your children and other family members about the dangers of rabies, the threat of exposure from wild animals and the things they need to do to stay healthy and rabies free.

Flu is a serious contagious disease.

Each year in the United States, on average, more than 200,000 people are hospitalized and 36,000 people die from seasonal flu complications.

This flu season could be worse.

There is a new and very different flu virus spreading worldwide among people called novel or new H1N1 flu. This virus may cause more illness or more severe illness than usual.

Flu-like symptoms include:

- fever (usually high)
- headache
- extreme tiredness
- dry cough
- runny or stuffy nose
- muscle aches
- sore throat
- vomiting
- sometimes diarrhea

For more information, visit
www.cdc.gov
or call
800-CDC-INFO.

Department of Health and Human Services
Centers for Disease Control and Prevention

**CDC Says
“Take 3” Steps
To Fight The Flu**

**These actions
will protect
against the new
H1N1 too!**



CS205261-A

CDC urges you to take 3 action steps to protect against the flu.

#1

Take time to get vaccinated.

- CDC recommends a yearly seasonal flu vaccine as the first and most important step in protecting against seasonal flu.
- The seasonal flu vaccine protects against the three seasonal viruses that research suggests will be most common.
- Vaccination is especially important for people at high risk of serious flu complications, including young children, pregnant women, people with chronic health conditions like asthma, diabetes or heart and lung disease and people 65 years and older.
- Seasonal flu vaccine also is important for health care workers, and other people who live with or care for high risk people to prevent giving the flu to those at high risk.
- A seasonal vaccine will not protect you against novel H1N1.
- A new vaccine against novel H1N1 is being produced and will be available in the coming months as an option for prevention of novel H1N1 infection.
- People at greatest risk for novel H1N1 infection include children, pregnant women, and people with chronic health conditions like asthma, diabetes or heart and lung disease.



#2

Take everyday preventive actions.

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.*
- Avoid touching your eyes, nose or mouth. Germs spread this way.
- Try to avoid close contact with sick people.
- If you get the flu, CDC recommends that you stay home from work or school for 7 days after symptoms begin, or until you are symptom free for 24 hours, whichever is longer.
- While sick, limit contact with others to keep from infecting them.

**Though the scientific evidence is not as extensive as that on hand washing and alcohol-based sanitizers, other hand sanitizers that do not contain alcohol may be useful for killing flu germs on hands in settings where alcohol-based products are prohibited.*



#3

Take flu antiviral drugs if recommended.

- If you get seasonal or novel H1N1 flu, antiviral drugs can treat the flu.
- Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu by keeping flu viruses from reproducing in your body.
- Antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious flu complications.
- Antiviral drugs are not sold over-the-counter and are different from antibiotics.
- Antiviral drugs may be especially important for people who are very sick (hospitalized) or people who are sick with the flu and who are at increased risk of serious flu complications, such as pregnant women, young children and those with chronic health conditions.
- For treatment, antiviral drugs work best if started within the first 2 days of symptoms.



HEALTH ALERT

Novel H1N1 Flu

Look for these symptoms:

FEVER AND

- Cough
- Sore throat
- Runny or stuffy nose

Other symptoms may include:

- Body aches
- Headache
- Fatigue
- Chills
- Diarrhea
- Vomiting

People with certain chronic medical conditions, adults 65 years or older, children younger than 5 years old, and pregnant women may be at higher risk for severe illness.

IF YOU THINK YOU HAVE H1N1 FLU:

- **Stay at home** or in your hotel room if traveling, except to seek medical care. Do not travel or go to work or school.
- **Avoid close contact** with others for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer.



EVERYONE SHOULD:

- **Cover your mouth and nose** with a tissue when you cough or sneeze.
- **Wash your hands often** with soap and water or use an alcohol-based hand gel.
- **Avoid touching your eyes, nose or mouth.**
- **Avoid contact with ill persons.**

For more information:

- Visit <http://www.cdc.gov/h1n1flu>
- Contact CDC 24 Hours/Every Day
 - > 1-800-CDC-INFO (232-4636)
 - > TTY: (888) 232-6348
 - > cdcinfo@cdc.gov
- Contact your local or state health department



DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
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Spring and summer bring warm temperatures, just right for walking in the woods and other outdoor activities. Warm weather also means that ticks become active and this can lead to the transmission of tick-borne disease.

The tick-borne diseases most often found in Virginia are Lyme disease, Rocky Mountain spotted fever, and ehrlichiosis.

Lyme Disease

Lyme disease, first identified in 1975 in Lyme, Connecticut, is a bacterial illness transmitted by a tick bite. It is caused by *Borrelia burgdorferi*, spiral-shaped bacteria called spirochetes. Although the disease is found more frequently in Northeastern and the upper Midwest states, cases have been reported in Virginia since 1982. The number of cases reported in Virginia has ranged from a low of 54 in 1989 to a high of 259 in 2002. The disease is found mainly in the northern and eastern parts of the state.

The Tick

The black legged or deer tick (*Ixodes scapularis*, previously called *Ixodes dammini*) is the most common carrier of Lyme disease in the eastern United States. It takes approximately two years for the ticks to complete their life cycle from eggs to adults. The adult deer tick feeds and mates on the white-tailed deer in the fall and winter. In the spring it drops off to lay eggs which hatch into larvae. During the summer, the larvae feed on small rodents, most commonly the white-footed mouse.



If the rodents are carrying the *B. burgdorferi* bacteria that cause Lyme disease, the tick larvae can become infected. Once they feed, the larvae molt into nymphs,

which are dormant during the winter and become active the following spring and summer. If the larvae were infected, the nymphs will also contain the bacteria.

Transmission usually occurs when the nymph is active and feeds on small and large animals, and occasionally on humans (hosts). At the nymph stage, the tick is about the size of a pinhead. By fall nymphs become adults which may also transmit the disease. Transmission by the nymph or adult usually does not occur until the tick has been attached to a host for over 1 to 2 days.

Although black legged or deer ticks are most commonly found in the eastern part of Virginia, they are not as common as American dog and lone star ticks, neither of which transmit Lyme disease. Virginia studies done in the mid 1980s on the Eastern Shore and in the Williamsburg/Yorktown area identified *B. burgdorferi* infected rodents and ticks, but the percentages that were infected were much lower than in other parts of the country where more human cases are reported. There have been no recent studies to see how these infection rates may have changed over time.



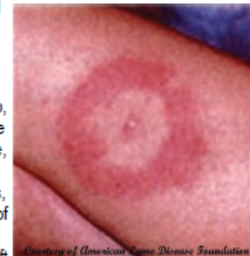
Dog tick (*Dermacentor variabilis*), deer tick *Ixodes scapularis*, Lone Star tick (*Amblyomma americanum*)

The Symptoms

Within three days to a few weeks after being bitten by an infected tick, 70 to 90 percent of people develop a circular or oblong rash, called erythema migrans or EM, at the site of the bite. The EM rash increases to two to three inches in diameter and sometimes to as large as 20 inches. As it enlarges, the center of the rash clears giving it a "bull's eye" appearance. Sometimes multiple rashes occur. Because it does not itch or hurt, EM may

not be noticed by everyone who has the rash.

In addition to, or instead of the EM, headache, fever, muscle and joint aches, and a feeling of tiredness can occur. If left



untreated, Lyme disease can progress to an early phase affecting the joints, nervous system or heart. This occurs several weeks to months after the tick bite. In a small percentage of infected people, late symptoms may occur months to years later with long term nervous system problems or arthritis.

Because the deer tick is so small in its nymph stage, many people are not aware of its bite. If you have been in an area that may contain ticks and you experience any of these symptoms, contact your doctor. State that you may have been bitten by a tick. This is extremely important because the early diagnosis of Lyme disease is usually based on symptoms and history of tick exposure. The available blood tests are not completely reliable and early in the disease they are often negative. On the other hand, there are confirming tests for the late complications of Lyme disease that are usually reliable. Studies have shown that many people who think they have the late stages of Lyme disease actually suffer from other illnesses so getting a second, confirming test for Lyme disease is important.

The Treatment

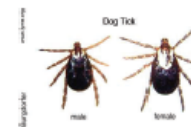
When Lyme disease is detected early, it can be mild and easily treated with oral (by mouth) antibiotics such as tetracycline or penicillin. Even in the late stages, Lyme disease usually can be treated successfully with antibiotics, but the treatment lasts longer and is more involved.

Rocky Mountain Spotted Fever

Rocky Mountain spotted fever is characterized by a sudden onset of symptoms and can be fatal if not treated. It is caused by bacteria called *Rickettsia rickettsii*. Between 1974 and 1982, an annual average of 112 cases and three deaths were reported in Virginia. In recent years, only about 38 cases and less than one death per year have been reported. Nearly all cases occur in the spring and summer months.

The Tick

In Virginia, the dog tick (*Dermacentor variabilis*) commonly carries the organism that causes Rocky Mountain spotted fever. The tick is usually attached to a host for four to six hours before it transmits the disease.



The Symptoms

Early symptoms of Rocky Mountain spotted fever, which start 2 to 14 days after the tick bite, include fever, deep muscle pain, severe headache, chills, and upset stomach or vomiting. Around the third day a red, spotted rash usually appears, beginning on the wrists and ankles. It spreads quickly to the palms and soles and then to much of the rest of the body.



Blood tests can confirm the presence of the disease, but two tests spaced several weeks apart may be required.

The Treatment

Treatment should start as soon as possible based on symptoms and history of tick exposure rather than waiting for blood test confirmation. Antibiotics in the tetracycline family are usually administered to treat the disease in adults. Other antibiotics are prescribed for children.

Ehrlichiosis and Anaplasmosis

Although there are multiple diseases that can be caused by bacteria in the ehrlichia and anaplasma families, the most common in Virginia are human monocytic ehrlichiosis (HME) and human granulocytic ehrlichiosis (HGE, more recently renamed anaplasmosis). HME is transmitted by the lone star tick and HGE by the black legged or deer tick.

The Symptoms

Symptoms for both HME and HGE can range from very mild to severe and include fever, headache, muscle pain, vomiting, and general discomfort. Early in the disease blood tests indicating low platelet counts and/or high liver enzymes may be helpful with diagnosis, but confirmation requires two specific blood tests spaced several weeks apart.

The Treatment

Both diseases respond to antibiotics in the tetracycline family and treatment should be based on symptoms (including platelet and liver enzyme tests) and history of tick exposure rather than waiting for confirmatory blood tests.

Other Diseases

Ticks can transmit other diseases, such as tularemia (rabbit fever) and babesiosis. Tularemia has a sudden onset with fever and chills. An ulcer develops at the site of the tick bite and surrounding lymph nodes

enlarge. Babesiosis is caused by an organism that affects red blood cells. Symptoms include fever, chills, muscle aches, fatigue, and jaundice. Persons who have had their spleens removed or have a weak immune system are more likely to experience severe disease or death from babesiosis. Antibiotics are used to treat both diseases.

Prevention

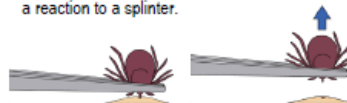
Ticks do not jump or fly onto people or animals. They wait on low vegetation, attach to hosts as they pass by, and crawl upward. The following steps can protect you against ticks and the diseases they carry:

- * Avoid tick-infested areas such as tall grass and dense vegetation.
- * Walk in the center of mowed trails to avoid brushing against vegetation.
- * Keep grass cut and underbrush thinned in yards. Follow directions carefully if chemicals are used for tick control or hire a professional.
- * Eliminate the living places of small rodents.
- * Wear light-colored clothing so that ticks are easier to see and remove.
- * Tuck pant legs into socks and boots. Wear long-sleeved shirts buttoned at the wrist.
- * Conduct tick checks on yourself, your children and your pets every four to six hours.
- * Apply tick repellent to areas of the body and clothing that may come in contact with grass and brush. Repellents include those containing up to 50% DEET for adults or less than 30% for children. A repellent/pesticide containing 0.5 percent permethrin may be applied to clothing, but should not be used on skin. Follow directions carefully and do not overuse. Some tick repellents can cause toxic or allergic reactions.
- * Ask your veterinarian to recommend tick control methods for your pets. Animals can get Lyme disease, Rocky Mountain spotted fever, and ehrlichiosis, but they do not transmit these diseases to humans.

Tick Removal

Because ticks do not transmit disease until they have been attached to the host for several hours to several days, it is very important to remove ticks as soon as they are found. The following is the best way to remove a tick:

- * Grasp it with tweezers as close to the skin as possible and gently, but firmly, pull it straight out. Avoid any twisting or jerking motion that may break off the mouth parts in the skin. Mouth parts left in the wound will not transmit the disease, but may cause a minor irritation or infection, similar to a reaction to a splinter.



- * If tweezers are not available, protect your fingers with gloves, tissue, or a paper towel. Do not touch the tick with bare fingers. The disease-causing organism can enter the body through a break in the skin on your fingers and cause disease.
- * After the tick has been removed, wash hands with soap and water. Apply an antiseptic to the bite site.
- * Dispose of the tick by drowning it in alcohol or flushing it down a drain or toilet.
- * Tick removal using nail polish, petroleum jelly, alcohol or a hot match is not safe.

If you get sick, and you have been exposed to ticks, be sure to tell your doctor about your tick exposure.

For more information, visit our website at:
www.vdh.virginia.gov/whc/external_whc/westnilevirus.asp



5/2005



Risk Management

http://www.aopa.org/asf/epilot_acc/nyc06fa215.html



VFR into IMC leads to in-flight breakup

VFR-only pilots who succumb to spatial disorientation during encounters with instrument conditions often fall prey to the so-called “graveyard spiral”—a descending turn that only gets tighter and steeper as the pilot pulls back on the yoke in a misguided attempt to stop the descent. In this scenario, ground impact is typically what destroys the airplane. But unusual attitudes can put tremendous strain on an airframe, and a panicked pilot lost in the soup can push an aircraft literally to the breaking point.

On Sept. 4, 2006, the noninstrument-rated pilot of a Cessna 150 became spatially disoriented when he flew into instrument meteorological conditions (IMC) near Penhook, Va. The aircraft entered an unusual attitude so extreme that the wings were torn from the airplane in flight. The pilot and his passenger were killed.

The flight left Smith Mountain Lake Airport in Moneta, Va., about 11:20 a.m., destined for Florence Regional Airport in Florence, S.C. Marginal VFR conditions prevailed at the time of departure. The pilot did not obtain an official weather briefing from either flight service or DUATS, although a relative later reported that the pilot said he checked the weather and that it “looked okay above 2,500 [feet].” No flight plan was filed.

Shortly after takeoff, the pilot contacted Roanoke approach control and requested VFR flight following. Seven minutes later, he asked the controller for information regarding cloud tops and ceiling height. At 11:31 a.m., the pilot asked ATC for a radar vector. When queried about the request, the pilot responded, “We’re kinda lost in some fog here.” The controller asked him to state his present heading, to which he replied, “I can’t tell—I think we’re upside down.” The controller instructed the pilot to turn right, and 18 seconds later told the pilot to stop the turn. During this time the airplane had actually completed a left turn and its altitude varied between 4,500 and 4,700 feet.

About 10 seconds later, at 11:32 a.m., the pilot announced, “We can’t see! We can’t see! We can’t see!” followed by an unintelligible transmission. The controller advised the pilot to stay calm and not to climb or descend. No further transmissions were received from the pilot, and radar contact was lost shortly thereafter.

A witness near the accident site reported that he heard “a loud pop.” When he looked up, he saw the airplane’s fuselage crash into nearby woods, then observed the wings “floating” down to the ground. Another witness said she heard the airplane, stepped outside her home, and saw the wings “twirling in the air.” Examination of the wreckage revealed that both wings had folded

upward near the roots before separating from the fuselage. Fracture surfaces and control cable breaks were consistent with in-flight overload.

Weather conditions at reporting stations near the accident site included visibility of two to three miles in rain and mist and overcast ceilings as low as 700 feet agl. Airmets for IFR conditions and mountain obscuration had been issued about one and a half hours before the accident airplane departed.

The NTSB determined that the accident resulted from the pilot's failure to maintain aircraft control, which led to G forces in excess of the airplane's design stress limits and, eventually, an in-flight breakup. Contributing factors were the pilot's continued VFR flight into IMC and his spatial disorientation.

When it comes to accident statistics, low ceilings and visibilities rank as the greatest weather hazard to the VFR pilot. Thunderstorms, icing, high winds, turbulence—none of these more dramatic, higher-profile threats comes close to killing as many pilots as simple, condensed water vapor.

The reason is simple: Most noninstrument-rated pilots have only a few hours of hood time in their logbooks, and these skills quickly atrophy after the private checkride. Caught in IMC and deprived of visual references, the VFR pilot begins to rely on the body's motion- and gravity-sensing organs—a system that is prone to illusion. In the battle of trust between instinct and instruments, the gauges typically lose.

The best way to avoid a VFR-into-IMC accident is to get an instrument rating and keep it current. Short of that, the key is understanding and respecting the weather. Always get a thorough preflight briefing, especially if conditions along the route are questionable. And remember that water vapor is fickle: Ceilings can drop quickly, fog can materialize rapidly, and the clear air between cloud layers can close in with little warning. Give yourself plenty of wiggle room, have a Plan B set to go, and don't hesitate to divert at the first sign of trouble.

Local NEWS

NEWPORT NEWS

Three teens die in car accident on I-64

They were not wearing seat belts; four others were injured when SUV flipped over

By Mike Holtzclaw

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NEWPORT NEWS — Three Peninsula teens, none of whom was wearing his seat belt, died after they were ejected from a sport utility vehicle that flipped on Interstate 64 in Newport News on Thursday night.

The other four people in the vehicle, three of whom were wearing their seat belts, survived the wreck.

Georgios Velissarios Raikos, 19, of Newport News, was pronounced dead at the scene on westbound I-64 near Jefferson Avenue. Patrick Mikel Kidd, 19, of Williamsburg, died at Riverside Regional Medical Center Thursday night. Willie Nathan-

iel Wells III, 19, of Newport News, died early Friday morning at Riverside.

The driver, 20-year-old Joseph Christopher Zastrow of Newport News, was wearing his seat belt and was not ejected. He was transported to Riverside with injuries that were not life-threatening.

He has been charged with reckless driving, said Sgt. Michelle Cotten of state police.

Zastrow was attempting to merge into traffic and lost control of the 2004 Ford Explorer when he swerved to avoid flexible upright poles marking a closed lane, Cotten said, causing the vehicle to flip over several times.

Raikos, Wells and Zastrow

were all 2007 graduates of Woodside High School.

A 19-year-old passenger who was not wearing his seat belt was ejected and was transported to Riverside with minor injuries.

Two other passengers, 18- and 19-year-old males, were in the back seat of the SUV and wearing their seat belts. They were not ejected, and they sustained minor injuries. They did not require hospitalization.

A dog that was unrestrained in the vehicle was taken to an emergency veterinary clinic to be treated for injuries. No information was available on the dog's condition.

The accident happened just before 8 p.m. Thursday.

The Jefferson Avenue exits were shut down for almost three hours while rescue crews and police tended to the victims and worked the scene.

NORFOLK

Portsmouth man dies in single-car wreck

The Virginia State Police reported Friday that a Portsmouth man died late Sunday night in a wreck near Terminal Avenue.

Mason Kevin Lorenzo, 36, died at the scene of the single-vehicle accident that occurred about 11:20 p.m., said Sgt. Michelle Cotten, a State Police spokeswoman.

Lorenzo was partially ejected from a 1984 Chevrolet Impala he was driving when it went off the road and struck the Jersey Wall and overturned halfway down

the Terminal Avenue off-ramp from Interstate 664, Cotten said.

Lorenzo was not wearing a seat belt, and speed was a factor in the crash, Cotten said. She added that it is unknown whether alcohol was a factor.

Daily Press 4 Aug 2009

THE SENTINEL

OFFICIAL SAFETY NEWSLETTER OF CIVIL AIR PATROL

Loss of Situational Awareness Due to Ineffective Scan

The Civil Air Patrol is continuing to have mishaps in aircraft, vehicles and during cadet and senior ground activities that appear to be due to a loss of Situational Awareness (SA). This loss seems to be due to, for lack of a better term, ineffective scanning. We are landing our aircraft fast resulting in damaged firewalls, slow resulting in hard landings. Vehicles are backing into objects and running into other vehicles. On the ground we are stepping into holes, tripping over curbs, not keeping ourselves hydrated, cutting ourselves with knives and the list goes on. Are we really paying attention? Probably not since the reports of these mishaps make a rather large list. Thank goodness for on-line reporting.

This article is mainly directed toward our aviation group as that is where an enormous amount of CAP funds are directed in repairing mishap damaged. However, if you look at the areas of vehicles and ground missions, encampments and PT, you will see that this is a problem in each of these areas, too.

Please read this article and have a discussion with both your senior members and cadets in every arena to see how it is pertinent you and your mission.

At no time is an effective, timely cockpit-outside visual scan more critical than during the performance of maneuvers. When an inappropriate or ineffective scan pattern is used, the possibility of a loss of situation awareness (hereafter, LSA) onset is greatly increased. Indeed, the breakdown in scan is one of the leading contributors to mishaps where LSA was identified as a causal factor.

The development of a 'good' scan requires training and practice. However, initial and refresher scan training remain, for the most part, minimal at best. Further, where such training is provided, the means for assessing accurate scan performance lacks a firm empirical basis upon which to provide the pilot with constructive feedback.



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The Sentinel — Civil Air Patrol's Safety Newsletter — August 2009

What is Situation Awareness (SA)? SA: An attention-based phenomenon reflecting the state of a pilot's awareness based on:

- The *perception & cognition* of *information* related to the 3-dimensional spatial world in and about the aircraft and the hazards associated with that environment.
- The *systems* (especially those that are automated) onboard the aircraft itself.
- The nature of the *tasks* at hand.

The extent and accuracy of this information is a function of what has been, or not been, attended to by the pilot over time. This information is then used, or not, to dictate pilot actions.

The types of SA associated with Visual Attention are – spatial; hazard; temporal; mode; task/procedural.

Causes for Visual SA Problems:

Pilot unable to perceive SA-critical elements –

- Obstructed from view.
- Not available on cockpit displays/other nav aids.

Illusions –

Data masked by other tasks/attention-catching stimuli –

- Information available, but a failure at data sampling due to distractions or fixation on other indicators.
- Common in high workload environments.
- Visual dominance may preclude pilot from hearing warning (gear up landing).

Inadequate/ineffective training –

- Created own strategies.
- Training failed to transfer.

Principles of scan and situational awareness:

Tactical visual scan: a sequential monitoring task where a pilot combines the data gained from each separate outside and cockpit instrument fixation into a full representation of aircraft state (*situation awareness*). Pilots quickly create scan and fixation patterns for each different required maneuver (i.e., transition through heading and altitude, takeoff, landing, etc.).

Scan characteristics (pattern, frequency and duration of fixations): determined by the intrinsic nature, complexity, and importance of the information provided by inside/outside visual targets, and pilot expertise.

Scan patterns and fixations may reflect a strategy based on what a pilot needs to know, or thinks he/she needs to know, at a given time.

The optimal pilot might balance the gains and costs in sampling certain data while neglecting others; the cost of which may be worth incurring to get the information needed.

Pilots employing non-optimal scan strategies may fixate or scan inappropriately, thereby missing important information that can result in a high cost both aircraft and crew.

What Causes scan to 'Breakdown'? Distractions, workload, automation, complacency, inadequate/inaccurate mental model, display design - "Glass Cockpit", lack of/poor scan training.

One possibility is that the use of ineffective scan begins early in flight training. How is cockpit scan taught? Cockpit scan is regarded as the most basic and important skill in instrument flight. However, a review of military, commercial and general aviation instrument training programs reveals a remarkable lack of standardized syllabi associated with teaching cockpit visual scan.

In some cases, scan is not taught at all, or is at best given short shrift. When scan is taught, instructors commonly employ a technique known as 'guided training', whereby students are told which instruments to scan and when to scan them. The instructor is normally unable to confirm whether or not the pilot is actually scanning effectively. Rather, the instructor assumes that if the aircraft is not where it should be at a given point in time, then the pilot has not correctly controlled the aircraft due, in part, to the use of ineffective scan and crosscheck techniques.

The best way to ensure that a pilot is scanning effectively is to provide a structured, standardized training scan training program; one which includes a means of ensuring that scans are indeed going where and when they should.

This previously stated, article was written primarily for the pilots; however, there is basically no difference in the scan vs. situational awareness whether driving a CAP vehicle or cadets and seniors performing activities such as encampments, PT or ES. Scan for the hazards (ORM) and use this information to keep yourself and others safe in the performance of your duties.

Col Lyle E. Letteer, CAP
National Safety Officer

Lightning Safety

The National Weather Service (NWS) reports a 30-year average of 58 deaths per year in the United States, including Puerto Rico, due to lightning strikes. So far this year 28 fatalities have occurred with four happening in Florida.

At a wing encampment this year, lightning struck a communications antenna mounted on a trailer parked adjacent to the building being used as the encampment headquarters. The strike damaged several pieces of equipment. A cadet was using a laptop at the encampment headquarters and experienced an electrical shock. Luckily the cadet suffered no lasting side effects, complications or restrictions to duty.

The investigation revealed neither the antenna nor the trailer was grounded. According to CAPR 100-1, *Communications*, paragraph 7-1b, *Equipment Grounding*: "All communications equipment not in motion will be adequately grounded at all times." Paragraph 7-1e states, "Lightning arrestors or grounding switches should be installed on all antennas."

The above incident represents two unsafe actions: communications equipment not being grounded and using a computer during an electrical storm.

The National Weather Service has a lightning safety website (<http://www.lightningsafety.noaa.gov/overview.htm>) that provides these tips to avoid injury during thunderstorms:

- Thunderstorms happen year round.
- Lightning can strike as far 10 miles from the area of rain as it can travel horizontally many miles away from the thunderstorm and then strike the ground. These types of lightning flashes seem to come out of a clear blue sky. While blue sky may exist overhead, a thunderstorm is always located 5 miles, 10 miles or farther away.
- Remember: If you can hear thunder, you are close enough to be struck by lightning.
- *There is little you can do to substantially reduce your risk if you are outside in a thunderstorm.*
- Move to a safe shelter like a fully enclosed building with a roof, walls and floor, and with has plumbing and/or wiring. **Unsafe buildings** include car ports, open garages, covered patios, picnic shelters, beach pavilions, golf shelters, tents of any kinds, baseball dugouts, sheds and greenhouses.
- If lightning should directly strike a building with electricity and/or plumbing, the current will typically travel through the wiring and/or

plumbing, and then into the ground. Stay away from showers, sinks, hot tubs, and electronic equipment such as TVs, radios, corded telephones and computers.

- If you are unable to take shelter in a safe building, seek a safe vehicle. One that is fully enclosed, metal topped such as a hard topped car, minivan, bus, truck, etc. **Unsafe vehicles** include convertibles, golf carts, riding mowers, open cab construction equipment and boats without cabins.
- Do NOT leave the vehicle during a thunderstorm.
- While inside a safe vehicle, do not use electronic devices such as radio communications during a thunderstorm. Lightning striking the vehicle, especially the antenna(s), could cause serious injury if you are talking on the radio or holding the microphone at the time of the flash.
- Remain inside the safe building or vehicle 30 minutes after you hear the last clap of thunder.

If you are outside and away from a safe building or vehicle, these tips will *not* prevent you from being struck by lightning, but may *slightly* lessen the odds.

- If camping, hiking, etc., far from a safe vehicle or building, avoid open fields, the top of a hill or a ridge top. Keep away from tall, isolated trees or other tall objects. If you are in a forest, stay near a lower stand of trees. If you are camping in an open area, set up camp in a valley, ravine or other low area (although possible flash flooding should also be considered). Remember, a tent offers NO protection from lightning.
- Stay away from water, wet items such as ropes, and metal objects such as fences and poles. Water and metal are excellent conductors of electricity. The current from a lightning flash will easily travel for long distances.
- The vast majority of lightning injuries and deaths on boats occur on small boats with no cabin. If you are caught in a thunderstorm on a small boat, drop anchor and get as low as possible.
- Boats with cabins offer a safer, but not perfect environment. Safety is increased further if the boat has a properly installed lightning protection system. If you are inside the cabin, stay away from metal and all electrical components. Stay off the radio unless it is an emergency.

Following the above NWS lightning safety tips will lessen the risk of injury to yourself, your personal property and CAP's property.

Lt Col Brenda Allison, CAP
Asst National Safety Officer

Summary of Form 78 Accidents and Incidents for June 2009

Aircraft

- Aircraft wingtip struck hangar while taxiing
- Tow hook damaged during glider tow operation
- Dent found on leading edge of right wing
- Aircraft wing tip grazed a light pole while taxiing
- Tail tie down ring sheared off during soft field takeoff
- Nose wheel tire flat on landing rollout
- Found small dent and paint missing on wing tip
- Aircraft hit runway light while taxiing in grass to tie down area

Vehicle

- Van damaged by private trailer being pulled by a POV

Bodily Injury

- Wind blew AVGAS into a cadet face after removing nozzle from aircraft
- Cadet suffered allergic reaction during refueling
- SM lacerated foot getting off bunk bed
- Cadet lacerated face hitting headboard on bunk bed
- Cadet had allergic reaction to 8 insect bites
- Cadet fell on obstacle course and broke wrist